

INTERCONNECTIONS WITH ELECTRICALLY CONDUCTIVE ADHESIVES:
STRUCTURES, MATERIALS, METHOD AND THEIR APPLICATIONS

ABSTRACT OF DISCLOSURE

5 A new interconnection scheme is disclosed for a tape
automated bonding (TAB) package, a flip chip package and an
active matrix liquid crystal display (AMLCD) panel, where an
electrically conducting adhesive is used to form an
electrical interconnection between an active electronic
device and its components. The electrically conducting
10 adhesive can be a mixture comprising a polymer resin, a
no-clean solder flux, a plurality of electrically conducting
particles with an electrically conducting fusible coating
which provides a metallurgical bond between the conducting
particles as well as to the substrates. The advantages of
15 using the electrically conducting adhesives include
reduction in bonding pressure and/or bonding temperature,
control of interfacial reactions, promotion of stable
metallurgical bonds, enhanced reliability of the joints, and
others.